Editorial: AI and new digital technologies have transformed alcohol and other drug industries lobbying

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B usiness efforts to influence public policy, commonly known as corporate lobbying, attract much controversy due to the inherent imbalance in resources between the corporate sector and the general public, and the lack of transparency concerning influence (Ihlen *et al.* 2022). Corporations have significantly more time and money to engage with political decision-makers than ordinary citizens. In the field of the commercial determinants of health, a growing research literature has begun documenting how corporations selling alcohol and other drug (AOD) products lobby policymakers to avert stricter regulations on prices, advertising, products and availability. Spurred by the release of tobacco industry documents in the 1990s, studies of corporate political activity have demonstrated how similar tactics are adopted by various sectors: tobacco (Savell *et al.*, 2014), alcohol (McCambridge *et al.*, 2018), gambling (Adams, 2016), food (Mialon *et al.*, 2015) and more recently the legal cannabis industry (Adams *et al.*, 2021) and vape sector.

The ongoing digital revolution, from algorithmic content distribution on social media to the recent and growing use of AI and large language processing (LLP) models, is changing the ways in which corporations can influence regulatory environments and public opinion (Murray and Flyverbom, 2020). Digital advertising and marketing have been at the forefront of research in the AOD space (Carah and Brodmerkel, 2021; Lyons *et al.*, 2023). However, the industry is using new technologies in areas beyond traditional marketing: digital platforms and AI can now be leveraged to connect with politicians, conduct mass public relations (PR) campaigns and influence policy processes and directions. For example, AI-powered bots can chime in with public debates, and social media platforms offer new spaces for connecting with politicians and building communities of support. Against this background, critical social sciences have raised concerns about the design and inscription of new technologies: AI and other LLP models can reinforce harmful assumptions and contribute to perpetuating health inequities and discrimination of certain groups (Baumgartner *et al.*, 2023). This is often attributed to the algorithmic biases that can be inscribed in the design of these technologies (Benjamin, 2019). Drawing on emerging studies from public health, business and science and technology studies, we discuss how the new digital tools might be used by AOD industries to influence public policy.

Online networking with politicians and key stakeholders

Corporate lobbyists spend significant time and resources building relationships with politicians, and social media platforms have provided a new tool to initiate and nurture such contacts outside of formal and informal meetings (Ihlen *et al.*, 2022). In the healthcare policy context, for example, a study in Norway identified how businesses and other interest groups

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used Twitter to communicate their support for certain politicians and policies (Figenschou and Fredheim, 2020). In the food sector, a study of the ultra-processed food industry measured how food companies tag and retweet policymakers' social media content (both positively and negatively) to engage with politicians and influence the policy debate in Australia (Hunt, 2021).

In the case of "controversial" AOD industries that sell products such as alcohol, tobacco, vape and legal cannabis, the public nature and visibility of social media interactions may act as a disincentive for policymaker engagement with industry actors. However, we *have* witnessed politicians re-tweeting cannabis industry posts and companies tagging politicians on social media. As researchers, we have also been invited to connect with industry actors on social media, illustrating how businesses use these platforms to build wider networks with influential stakeholders: academics, civil society and professionals working in the field. These connections provide digital meeting points to promote industry-friendly narratives. The nature and frequency of digital networking by the AOD sector are starting to be studied, and social network analysis is a useful tool for understanding how industry connects with influential stakeholders and mobilises on social media in times of heightened legislative activity (Haupt *et al.*, 2021; Rychert *et al.*, 2022).

Digital astroturfing and AI in policy consultation processes

Consultative mechanisms such as public hearings, submissions and industry consultations provide a formal avenue for industry input into policy decision-making. New technologies have created opportunities to influence and manipulate these processes, complicating already existing challenges with ensuring their transparency.

"Digital astroturfing", for example, is an influence strategy that can be used during public consultation to create the perception of wider public support for a policy. Astroturfing involves faking a grassroots movement when the agenda is in fact controlled by a hidden company (Tobacco Tactics, 2022). A recent study revealed a digital astroturfing campaign by tobacco and vaping companies during consultations on the proposed restrictions on vaping products in Australia. Researchers found that 26% of submissions from consumers contained copy-pasted text from a template provided by an industry-led campaign (Jongenelis *et al.*, 2023). As noted by the authors, using consumers to make submissions on behalf of the industry bypasses formal requirements to disclose conflicts of interest during public consultations.

The use of generative AI to manufacture fake submissions is another tactic that could be used to influence public policy consultation. We are not aware of any examples of generative AI models deployed in this way, but it is an emerging threat to democratic processes and the issue is attracting the attention of policymakers in some countries (Ministry of Justice, 2023). The primary difficulty lies in verifying the authenticity of public submissions.

Indirect lobbying: algorithmic and participatory public relations campaigns

A more nuanced approach to influencing policy involves generating indirect pressure by persuading the public (rather than policymakers) to adopt a particular position on an issue. Traditionally, such influence occurs through promoting industry-friendly narratives in the mass media, advertorials, press releases and sponsorships. In the digital world public discourse can be manipulated more efficiently through platform algorithms and data-driven PR strategies.

On a rudimentary level, digital platforms have facilitated more customised and targeted (hence more efficient) PR campaigns. However, the real transformative effects of new digital technologies come from their data-driven and participatory nature. Specifically, they provide PR strategists and marketers with powerful tools to *organise* information and *feed algorithms* to refine public engagement with their messages, nurture communities of support and create

pro-consumption environments (Carah and Brodmerkel, 2021; Murray and Flyverbom, 2020). The corporate use of new digital technologies goes beyond sales-focused marketing. Rather, the broader aim of digital PR campaigns is to maintain the positive reputation of the industry, for example through reinforcing messages that companies make positive contribution to the economy and society, or that the industry is taking active steps to prevent health harms from their products (Adams *et al.*, 2021).

Social bots, for example, are AI-powered applications that automatically produce content and interact with humans (Ferrara *et al.*, 2016). Aside from automating routine commercial tasks such as customer service, bots can be used in corporate PR communication (Wischnewski *et al.*, 2024) and to influence public opinion and attitudes, as illustrated in the political science literature (Godulla *et al.*, 2021). Bots can leave comments, engage in conversations and distribute likes in social media on an automatic and semi-autonomous basis. Public debates on health issues and risky products can thereby be shaped through mass bot-assisted PR campaigns. For example, tweets posted from bot accounts have made unsubstantiated health claims about the therapeutic benefits of cannabis, illustrating how bots can be used to alter the knowledge and information environment (Allem *et al.*, 2019; Lim *et al.*, 2024). In turn, social media users engaging with such content leave traces of personal data, providing the PR campaigners with the opportunity to test, tailor and target corporate messages at unparalleled volume, speed and efficiency.

One of the latest emerging technologies used for PR purposes is the Metaverse, an immersive virtual reality (VR) version of the internet (Bushell, 2022). Alcohol, tobacco and cannabis companies already use the Metaverse – not only to promote their products but also to create immersive pro-consumption spaces and build communities of support, sometimes evading national laws (Alcántara, 2022; Vital Strategies, 2023). While there is uncertainty about the uptake of VR technology, many experts agree that augmented reality (AR) will dominate people's lives in the future (Appel *et al.*, 2020; PEW Research Centre, 2022). Companies in the AOD space were among the first to embrace AR. For example, several vape businesses integrated an AR-based game Pokémon Go into their promotions at the height of its popularity in 2016 (Kirkpatrick *et al.*, 2017). Besides marketing campaigns to increase sales, AR can be used in more sophisticated ways to support industry PR frames. For example, an industry-funded PR organisation *Drink Wise* engaged in sponsoring "selfie" filters on Snapchat (Hawker and Carah, 2021). In this approach, social media users were targeted with a promotional campaign that encouraged them to apply filters on their own videos or "selfies". The interactive nature of such campaigns has a potential to particularly manipulate young people and those less equipped to recognise the nature and origin of the messages. It illustrates how the sector can leverage new technology to promote so-called "responsible" alcohol consumption. The message that industry is actively engaged in activities to reduce alcohol harm is one of the key PR strategies used to lobby against more effective legislative controls (Ulucanlar *et al.*, 2023).

Reflecting on future research and regulatory priorities

The transformative role of new technologies in corporate political activity has implications for future research and the regulatory response. New digital technologies provide a new medium for industry-friendly messages and virtual spaces for connecting with policymakers, other policy stakeholders, consumers and the public. As such, studying the *content* of messages continues to be an important avenue of research. But the algorithmic and networked nature of digital spaces, combined with AI technology, mean that policy issues are also influenced by *how* these messages are organised and distributed in the digital realm. In other words, subtle forms of policy influence can be achieved through the *structuring* of information itself (Murray and Flyverbom, 2020). Scholars in business and management refer to this transformation as "datafied corporate political activity" (Murray and Flyverbom, 2020). Expanding on calls for greater attention to data-driven marketing by

the alcohol industry (Carah and Brodmerkel, 2021), we recommend a data-driven approach to understanding and researching industry political lobbying efforts.

The use of AI and algorithms to influence public opinion and policymakers presents a wide and significant challenge to political processes and democracy, and regulatory responses are lagging. For example, only Canada and the European Union require lobbyists to disclose information on the use of social media and other PR campaigns as a lobbying tool (OECD, 2022). With the subtler forms of corporate political influence currently hidden, the policy and regulatory responses to corporate lobbying need to reconceptualise corporate political activity as increasingly digital, data-driven, networked and AI-assisted. Care is needed in preventing algorithmic bias and designing ethically responsible tools to balance health promotion and consumer agency. The potential of new digital technologies will likely need to be harnessed in the future to protect the integrity of policy processes (e.g. to help identify AI-generated content). In the interim, improving the transparency of lobbying activities through mandatory registers and disclosures, including regarding the use of social media and AI, is an easily implementable and essential first regulatory response.

References

Adams, P. (2016), *Moral Jeopardy: Risks of Accepting Money from the Alcohol, Tobacco and Gambling Industries*, Cambridge University Press, Cambridge.

Adams, P., Rychert, M. and Wilkins, C. (2021), "Policy influence and the legalized cannabis industry: learnings from other addictive consumption industries", *Addiction*, Vol. 116 No. 11, doi: 10.1111/add.15483.

Alcántara, A. (2022), "Cannabis companies try the metaverse as a new marketing platform (2 June 2022)", available at: www.wsj.com/articles/cannabis-companies-try-the-metaverse-as-a-new-marketing-platform-11654164001

Allem, J.P., Escobedo, P. and Dharmapuri, L. (2019), "Cannabis surveillance with Twitter data: emerging topics and social bots", *American Journal of Public Health*, Vol. 110 No. 3, pp. 357-362, doi: 10.2105/AJPH.2019.305461.

Appel, G., Grewal, L., Hadi, R. and Stephen, A.T. (2020), "The future of social media in marketing", *Journal of the Academy of Marketing Science*, Vol. 48 No. 1, pp. 79-95, doi: 10.1007/s11747-019-00695-1.

Baumgartner, R., Arora, P., Bath, C., Burljaev, D., Ciereszko, K., Custers, B. and Williams, R. (2023), "Fair and equitable AI in biomedical research and healthcare: social science perspectives", *Artificial Intelligence in Medicine*, Vol. 144, p. 102658, doi: 10.1016/j.artmed.2023.102658.

Benjamin, R. (2019), *Race after Technology: Abolitionist Tools for the New Jim Code*, Wiley & Sons, NJ.

Bushell, C. (2022), "The impact of metaverse on branding and marketing", available at: https://ssrn.com/abstract=4144628 or doi: 10.2139/ssrn.4144628.

Carah, N. and Brodmerkel, S. (2021), "Alcohol marketing in the era of digital media platforms", *Journal of Studies on Alcohol and Drugs*, Vol. 82 No. 1, pp. 18-27.

Ferrara, E., Varol, O., Davis, C., Menczer, F. and Flammini, A. (2016), "The rise of social bots", *Communications of the ACM*, Vol. 59 No. 7, pp. 96-104.

Figenschou, T. and Fredheim, N. (2020), "Interest groups on social media: four forms of networked advocacy", *Journal of Public Affairs*, Vol. 20 No. 2, p. e2012, doi: 10.1002/pa.2012.

Godulla, A., Bauer, M., Dietlmeier, J., Lück, A., Matzen, M. and Vaaßen, F. (2021), "Good bot vs. bad bot: opportunities and consequences of using automated software in corporate communications", Retrieved from Leipzig, available at: www.ssoar.info/ssoar/handle/document/71669#

Haupt, M., Xu, Q., Yang, J., Cai, M. and Mackey, T. (2021), "Characterizing vaping industry political influence and mobilization on Facebook: social network analysis", *Journal of Medical Internet Research*, Vol. 23 No. 10, p. e28069, doi: 10.2196/28069.

Hawker, K. and Carah, N. (2021), "Snapchat's augmented reality brand culture: sponsored filters and lenses as digital piecework", *Continuum*, Vol. 35 No. 1, pp. 12-29, doi: 10.1080/10304312.2020.1827370.

Hunt, D. (2021), "How food companies use social media to influence policy debates: a framework of Australian ultra-processed food industry Twitter data", *Public Health Nutrition*, Vol. 24 No. 10, pp. 3124-3135, doi: 10.1017/s1368980020003353.

Ihlen, Ø., Lock, I. and Raknes, K. (2022), "Democracy, strategic communication and lobbying", *Research Handbook on Strategic Communication*, Edward Elgar Publishing, Cheltenham, UK, pp. 166-177.

Jongenelis, M., Robinson, A., Hughes, A. and Pettigrew, S. (2023), "Perceptions of a prescription model for accessing nicotine vaping products: an examination of submissions made by self-reported e-cigarette users to an Australian consultation", *Health Promotion International*, Vol. 38 No. 4, doi: 10.1093/heapro/daad080.

Kirkpatrick, M., Cruz, T., Goldenson, N., Allem, J., Chu, K., Pentz, M. and Unger, J. (2017), "Electronic cigarette retailers use Pokémon go to market products", *Tobacco Control*, Vol. 26 No. e2, p. e145, doi: 10.1136/tobaccocontrol-2016-053369.

Lim, C.C.W., Sun, T., Gartner, C., Connor, J., Fahmi, M., Hall, W. and Leung, J. (2024), "What is the hype on #MedicinalCannabis in the United States? A content analysis of medicinal cannabis tweets", *Drug and Alcohol Review*, Vol. 43 No. 1, pp. 28-35, doi: 10.1111/dar.13618.

Lyons, A.C., Goodwin, I., Carah, N., Young, J., Moewaka Barnes, A. and McCreanor, T. (2023), "Limbic platform capitalism: understanding the contemporary marketing of health-demoting products on social media", *Addiction Research & Theory*, Vol. 31 No. 3, pp. 178-183, doi: 10.1080/16066359.2022.2124976.

McCambridge, J., Mialon, M. and Hawkins, B. (2018), "Alcohol industry involvement in policymaking: a systematic review", *Addiction*, Vol. 113 No. 9, pp. 1571-1584, doi: 10.1111/add.14216.

Mialon, M., Swinburn, B. and Sacks, G. (2015), "A proposed approach to systematically identify and monitor the corporate political activity of the food industry with respect to public health using publicly available information", *Obesity Reviews*, Vol. 16 No. 7, pp. 519-530, doi: 10.1111/obr.12289.

Ministry of Justice (2023), "Political lobbying project: wider regulatory issues (New Zealand)", available at: www.justice.govt.nz/assets/Documents/Publications/Political-Lobbying-Project-Common-themes-from-meetings.pdf

Murray, J. and Flyverbom, M. (2020), "Datafied corporate political activity: updating corporate advocacy for a digital era", *Organization*, Vol. 28 No. 4, pp. 621-640, doi: 10.1177/1350508420928516.

OECD (2022), "Global initiative to galvanise the private sector as partners in combatting corruption", available at: www.oecd.org/gov/ethics/Background%20Paper%201_Getting%20Influence%20Right_May%202023_DRAFT.pdf

PEW Research Centre (2022), "The metaverse in 2040 (30 June 2022)", available at: www.pewresearch.org/internet/2022/06/30/the-metaverse-in-2040/

Rychert, M., Wilkins, C., van der Sanden, R. and Prasad, J. (2022), "Exploring digital news, advocacy networks and social media campaigns 'for' and 'against' cannabis legalisation during New Zealand's cannabis legalisation referendum", *Drugs: Education, Prevention and Policy*, Vol. 30 No. 5, pp. 1-11, doi: 10.1080/09687637.2022.2090897.

Savell, E., Gilmore, A.B. and Fooks, G. (2014), "How does the tobacco industry attempt to influence marketing regulations? A systematic review", *PLoS ONE*, Vol. 9 No. 2, p. e87389, doi: 10.1371/journal.pone.0087389.

Tobacco Tactics (2022), "Astroturfing (last edited 12 march 2022)", available at: https://tobaccotactics.org/article/astroturfing/

Ulucanlar, S., Lauber, K., Fabbri, A., Hawkins, B., Mialon, M., Hancock, L. and Gilmore, A. (2023), "Corporate political activity: taxonomies and model of corporate influence on public policy", *International Journal of Health Policy and Management*, Vol. 12 No. 1, pp. 1-22, doi: 10.34172/ijhpm.2023.7292.

Vital Strategies (2023), "The next frontier in tobacco marketing: the metaverse, NFTs, advergames and more", available at: https://termcommunity.com/assets/publication/20231107224746000000_The_Next_Frontier_in_Tobacco_Marketing_EN.pdf

Wischnewski, M., Ngo, T., Bernemann, R., Jansen, M. and Krämer, N. (2024), "I agree with you, bot!" how users (dis)engage with social bots on Twitter", *New Media & Society*, Vol. 26 No. 3, pp. 1505-1526, doi: 10.1177/14614448211072307.